

## **REMARKS**

Applicant has carefully studied the Notice of Not Fully Responsive Amendment mailed May 25, 2010, having a shortened statutory period for response set to expire on June 25, 2010. These explanatory remarks are believed to be fully responsive to the Action. Accordingly, this important patent application is now believed to be in condition for allowance.

### ***Claim Rejections - 35 U.S.C. § 112***

Applicant thanks the Office for bringing to Applicant's attention the inadvertent omission of remarks pertaining to the 35 USC 112, second paragraph rejection of claims 1 and 5-11. The Office found the limitation of "generating myocytes further comprising administering an effective amount of a composition comprising an umbilical cord blood cell to an individual with a circulatory disorder" to be unclear as to whether the step of generating myocytes requires *in vitro* or *ex vivo* steps for the generation of myocytes.<sup>1</sup> Applicant amended claim 1 in Amendment F, filed March 3, 2010, to recite

generating myocytes further comprising:  
administering an effective amount of the composition comprising an umbilical cord blood cell to an individual with a circulatory disorder, wherein the umbilical cord blood cell differentiates into a cardiac muscle cell after administration.

It is submitted that this amendment clarifies the steps taken, in particular providing that the UCBCs differentiate into myocytes after administration, i.e. *in vivo*. Accordingly, Applicant respectfully requests the Office withdraw the 35 USC 112, second paragraph rejection of claims 1 and 5-11.

### ***Conclusion***

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the Office is not fully persuaded as to the merits of Applicant's position, or if an Examiner's Amendment would place the pending claims in condition for allowance, a telephone call to the undersigned at (813) 925-8505 is requested.

---

<sup>1</sup> Page 2 of the non-final Office Action, dated December 3, 2009.

Very respectfully,

SMITH & HOPEN

/robert varkonyi/

Dated: June 9, 2010  
Customer No. 21,901

By: \_\_\_\_\_  
Robert Varkonyi  
Reg. No. 63,885  
180 Pine Avenue North  
Oldsmar, Florida 34677  
Attorney for Applicant

*CERTIFICATE OF ELECTRONIC TRANSMISSION*

**(37 C.F.R. 2.190 (b))**

I HEREBY CERTIFY that this correspondence is being electronically transmitted to the Patent and Trademark Office through EFS Web on June 9, 2010.

Date: June 9, 2010

/lauren reeves/

\_\_\_\_\_  
Lauren Reeves